

CS05: IBM CICS TG plug-ins for use with CICS Explorer

Current Version: v1.0, April 2009

Author: Rob Jones (rcjones@uk.ibm.com), IBM UK, Hursley

Description

This SupportPac provides a Gateway daemons view and a CICS connections view in the CICS TG perspective of the CICS Explorer.

You can view the status and activity of one or more Gateway daemons running on the z/OS platform. Use the Gateway daemons view to see an overall status of one or more Gateway daemons. Use the CICS connections view to see the connectivity between CICS servers and one or more Gateway daemons.

Switching to the CICS TG perspective gives fast access to the new views. Each view includes the attributes considered to be immediately useful. You can add further attributes or remove existing attributes as you require. You can see the full set of attributes in the Properties window, the attributes are grouped into predefined categories.

The ability to create a composite perspective is a powerful feature of the CICS Explorer. The views provided by the CICS TG plug-ins for CICS Explorer can be added to other perspectives. The CICS TG perspective can be customized to add other CICS Explorer views.

System Requirements

IBM CICS Explorer SupportPac V1.2 (CICS Explorer V0.5.2) or later:

- SupportPac CS1J (Windows)
- SupportPac CS1O (Linux)

CICS Transaction Gateway for z/OS

- V7.2
- V7.1 with PK57718 (UK38084)

CICS TG configurations

- remote mode
- one or more Gateway daemons
- EXCI and IPIC CICS connections

Skill level required

CICS Transaction Gateway for z/OS System Administrator

Supplied files

- cs05.zip - IBM CICS TG plug-ins for CICS Explorer package
- cs05.pdf - IBM CICS TG plug-ins for CICS Explorer documentation

Preparation

Download the file cs05.zip and unzip the contents to a known location, e.g. C:\temp\cs05. The target folder will contain:

- Licenses - sub-folder including the license agreement
- cics-tg.site.zip - a Software Update local archive “site” containing the IBM CICS TG plug-ins for CICS Explorer (do NOT unzip this file)
- CTGConnection.properties - a sample configuration file

Configuration and Installation

Three steps must be completed in order to use the CICS TG plug-ins for CICS Explorer.

1. You must define a statistics API protocol handler before a Gateway daemon can be viewed using CICS Explorer.
2. The details for the statistics API protocol handler of each Gateway daemon must be included within the CTGConnection.properties file. This file must be copied into the CICS Explorer folder.
3. The CICS TG plug-ins must be installed using the Software Update facility of the CICS Explorer.

CICS Transaction Gateway configuration

To use the CICS TG plug-ins for CICS Explorer, the statistics API hostname and port number of each Gateway daemon are required. The API hostname and port number must be defined for each Gateway daemon as a “statsapi” protocol handler. The protocol handler is defined in the GATEWAY section of the CICS TG configuration file.

For example:

```
protocol@statsapi.handler=com.ibm.ctg.server.RestrictedTCPHandler
protocol@statsapi.parameters=connecttimeout=2000;port=4148;
bind=myzos1.company.com;maxconn=5;
```

The statistics API port number can be overridden by specifying the “-statsport” switch on the `ctgstart` command. Typically, this is specified using the `CTGSTART_OPTS` environment variable on the CTGBATCH STDENV DD-card:

```
CTGSTART_OPTS=-statsport 48148
```

The statistics API port used by a Gateway daemon is reported by the informational log message CTG6524I, found in the Gateway daemon JES log. For example:

```
CTG6524I Successfully started handler for the statsapi:  
protocol on port 4148
```

CICS Explorer configuration

Since the CICS TG plug-ins for CICS Explorer utilizes the Gateway daemon statistics API port, the connection details for each Gateway daemon are required. These details must be provided in a file named “`CTGConnection.properties`” and located in the CICS Explorer program folder.

Customize the supplied sample configuration file (using a suitable text editor) to specify the name, statistics API hostname and port number for each Gateway daemon. The syntax of each line must be in the form:

```
com.ibm.ctg.gateway.<name>=<hostname>:<port>
```

... where `<name>` is an arbitrary label for a Gateway daemon and must be unique only within this file. `<hostname>` and `<port>` are the values identified or configured under the topic “CICS Transaction Gateway configuration”. Duplicate `<name>` entries will be ignored.

For example, to configure access to four Gateway daemons named CTGRED1, CTGRED2, CTGBLU1 and CTGBLU2, specify the following lines:

```
# My CICS Transaction Gateway daemons  
com.ibm.ctg.gateway.CTGRED1=myzos1.company.com:4148  
com.ibm.ctg.gateway.CTGRED2=myzos1.company.com:4149  
com.ibm.ctg.gateway.CTGBLU1=myzos2.company.com:4150  
com.ibm.ctg.gateway.CTGBLU2=myzos2.company.com:4151
```

Comment lines are denoted by the *pound* or *hash* symbol (“#”) prefix. This convention is a simple method for temporarily excluding entries from the configuration. For example, the following entry for CTGOLD1 is ignored:

```
#com.ibm.ctg.gateway.CTGOLD1=myzos3.company.com:4100
```

When you have completed the customization of the `CTGConnection.properties` file, you must copy it to the CICS Explorer program folder (Figure 1).

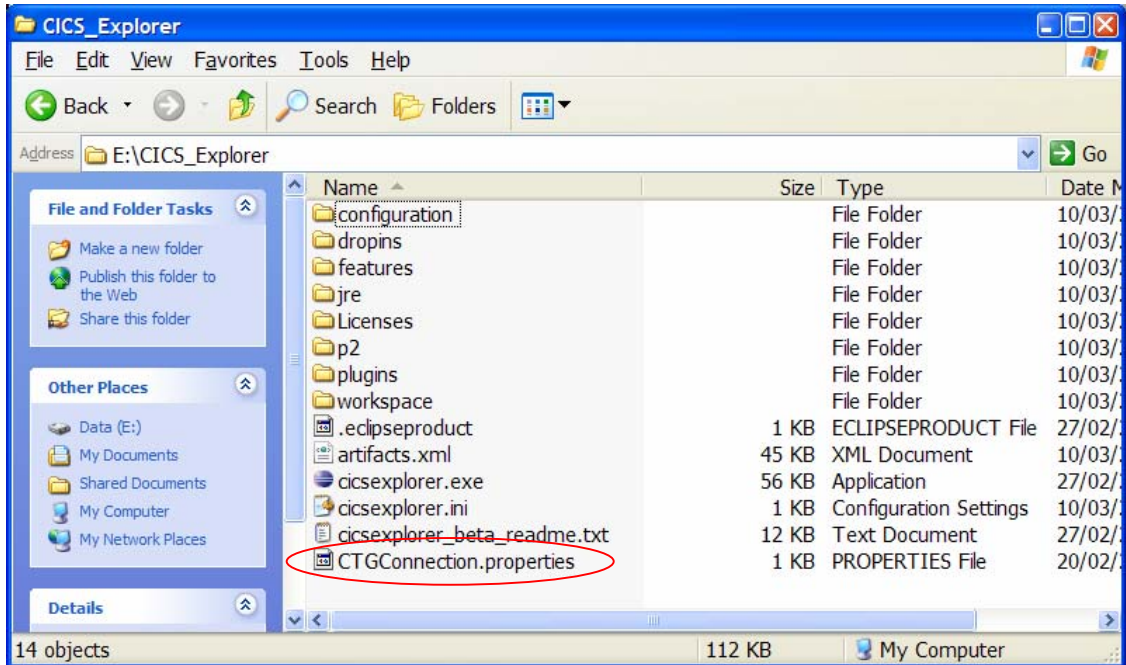


Figure 1 CTGConnection.properties location

Note: The `CTGConnection.properties` must be located within the current working directory of the CICS Explorer. If you start CICS Explorer using a shortcut on Windows, be sure to set the “Start in” location of the shortcut to the CICS Explorer directory. For the installation shown in Figure 1, this is “E:\CICS_Explorer”. On Linux, launch the CICS Explorer directly via the `cicsexplorer` executable, or create a shell script to ensure the current working directory is correct.

Installation or Update

For a new installation or an update you must to add the “update site” file (`cicstg.site.zip`) to the CICS Explorer.

1. To install or update the CICS TG plug-ins for CICS Explorer, start the CICS Explorer and select Help->Software Updates. The “Software Updates and Add-ons” panel is displayed.
2. Select the “Available Software...” tab, and click “Add Site...”. The Add Site window is displayed (Figure 2).

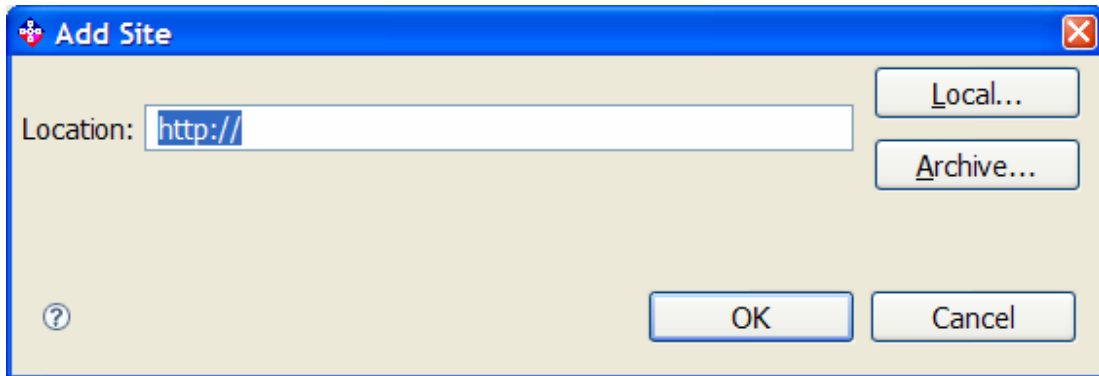


Figure 2 Software Updates... Add site

3. Click “Archive...” and navigate to the folder that contains the “cics-tg.site.zip” file (Figure 3).

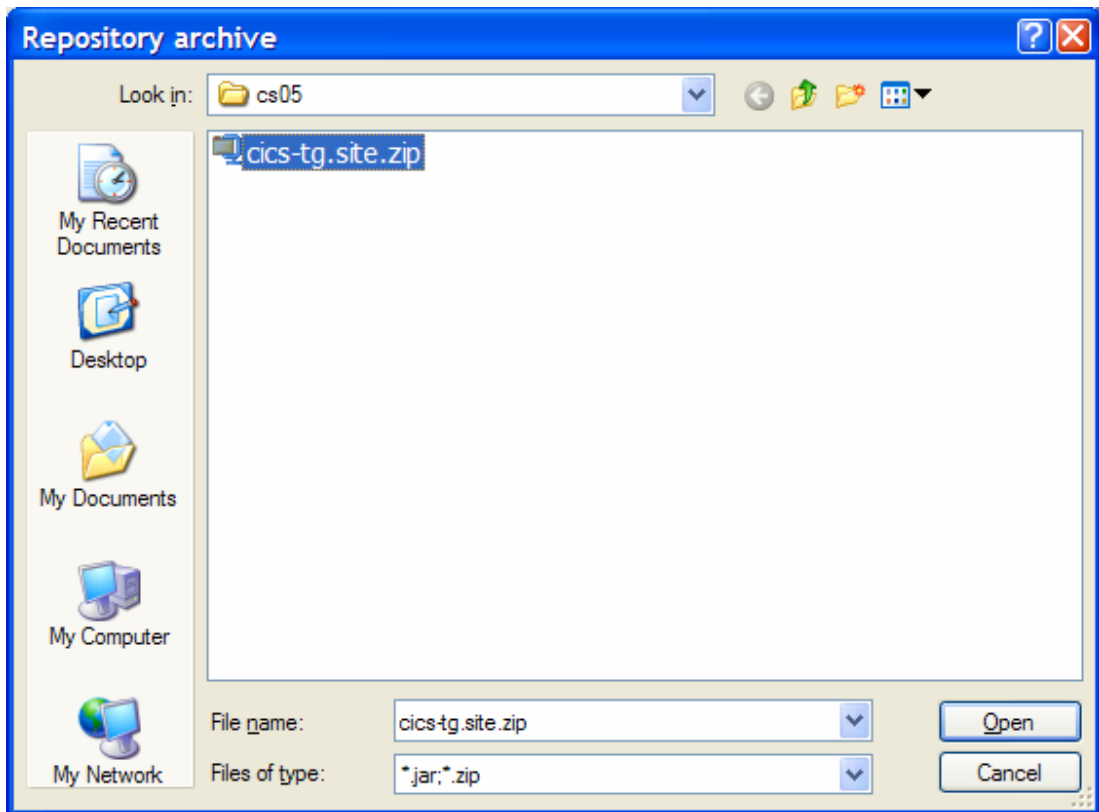


Figure 3 Software Updates... Repository archive

4. Select the `cics-tg.site.zip` file and click “Open”. When you return to the “Add Site” window, click “OK”.

The “IBM CICS TG plug-ins for CICS Explorer” is displayed in the “Available Software” tab of the “Software Updates and Add-ons” panel (Figure 4):

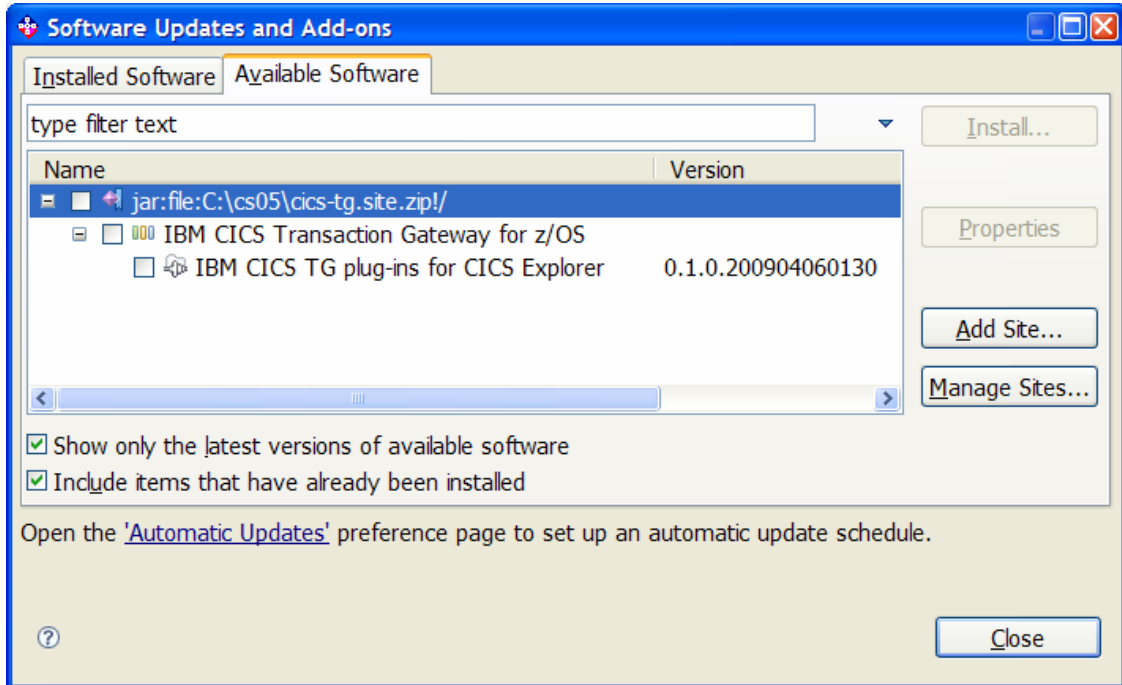


Figure 4 Software Updates and Add-ons

If you are performing a fresh installation of the CICS TG plug-ins into CICS Explorer follow step 5a.

If you are performing an update, follow step 5b.

5a. **Install.** Select “IBM CICS TG plug-ins for CICS Explorer” and click “Install...”. After some processing, the “Install” panel is displayed (Figure 5):

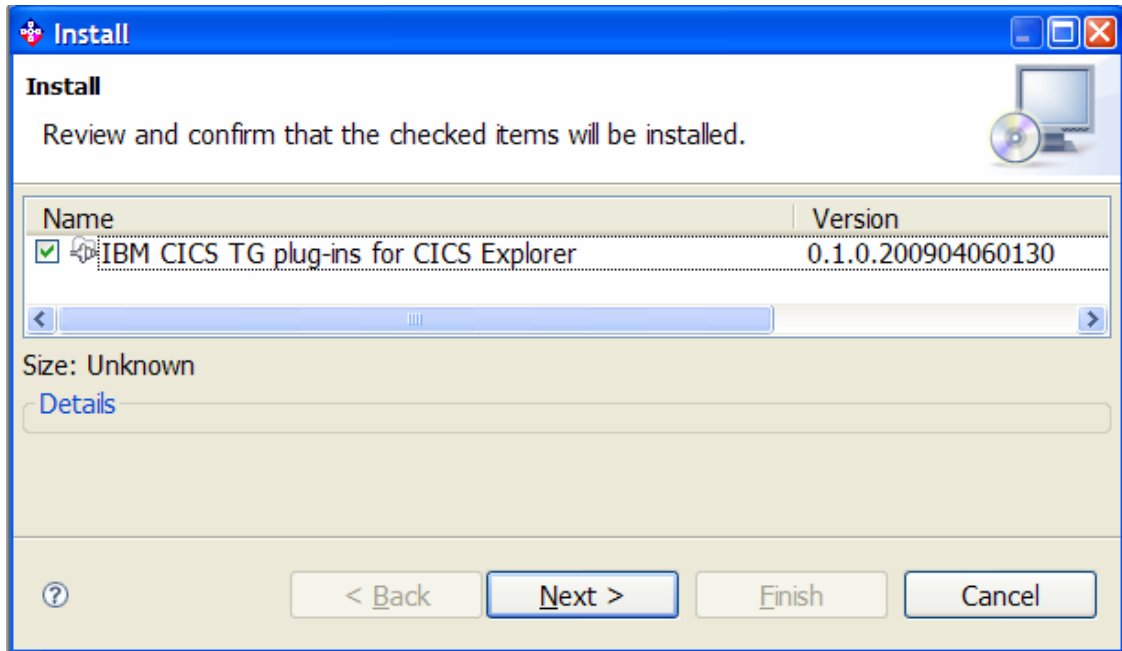


Figure 5 Software Updates... Install

Proceed to step 6.

5.b **Update.** Use the Installed Software tab, select “IBM CICS TG plug-ins for CICS Explorer” and click “Update” (Figure 6).

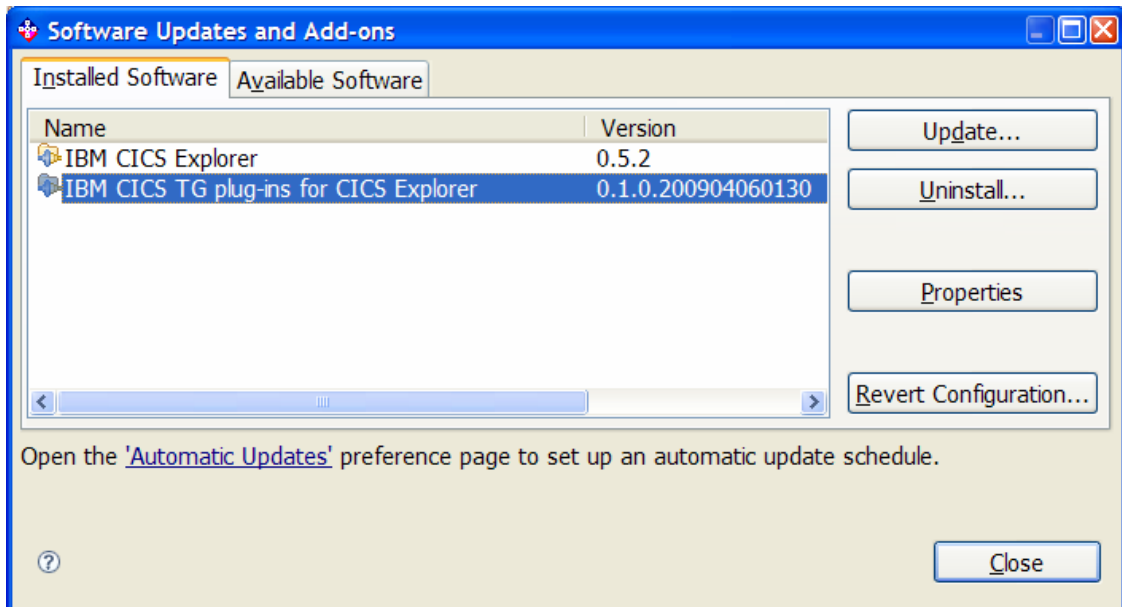


Figure 6 Software Updates... Update

Provided that a new version of the CICS TG plug-ins for CICS Explorer has been added in steps 1-4, the “Available Updates” window shows the details of the update (Figure 7):

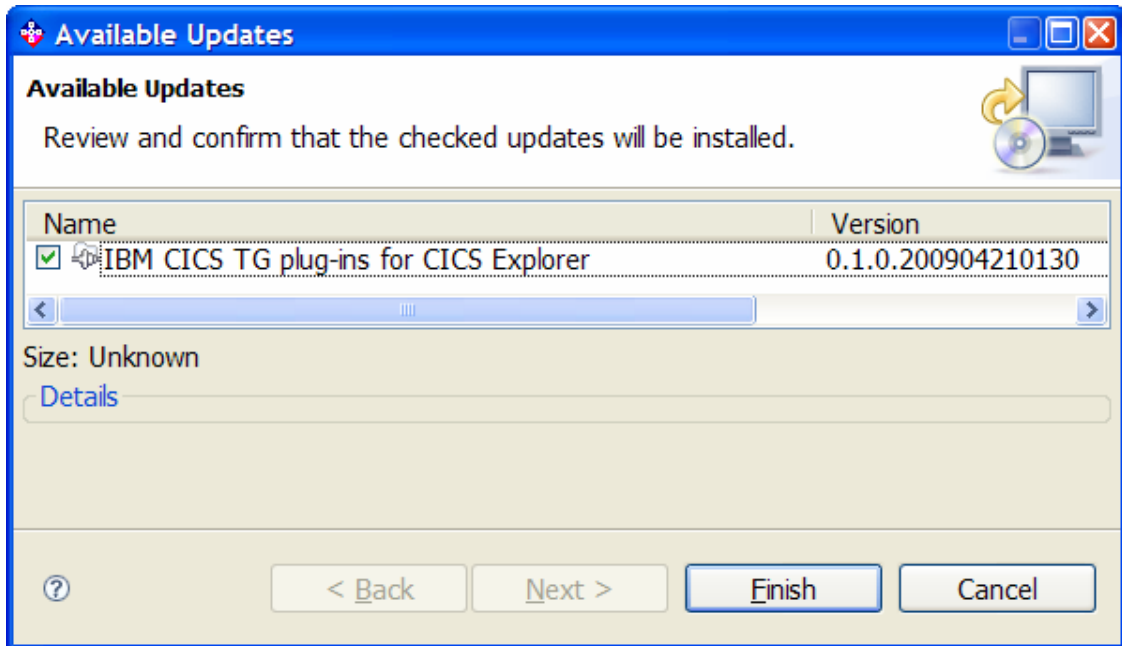


Figure 7 Software Updates... Available Updates

Proceed to step 7.

6. Before you can install, you must accept the license agreement. Click next and review the license. The license is supplied in the SupportPac “Licenses” sub-folder. If you accept, select the appropriate option, and select “Finish” (Figure 8).

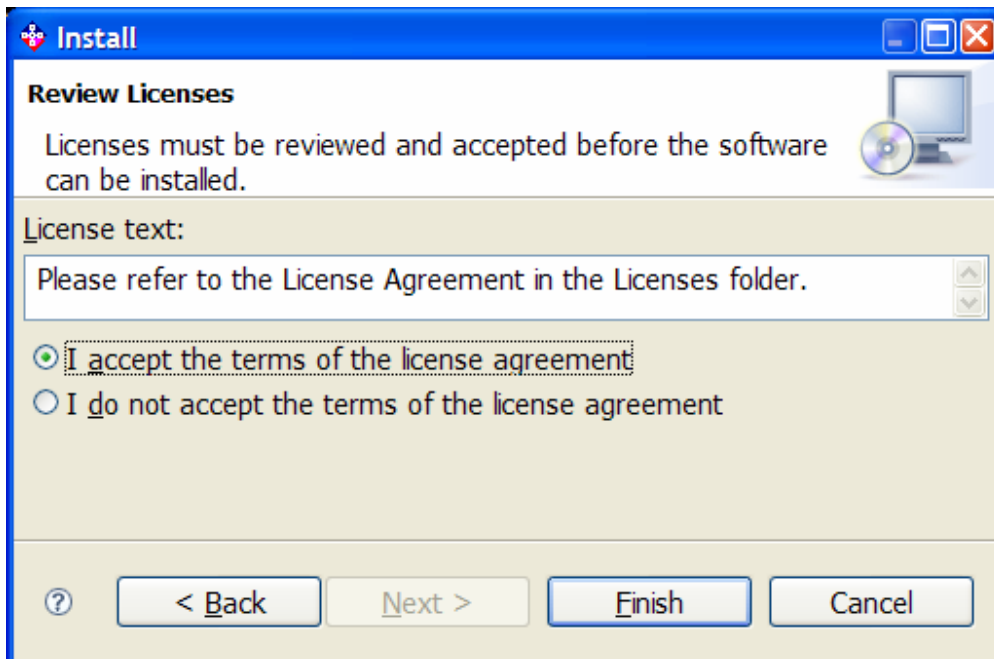


Figure 8 Install... Review Licenses

7. Click “Finish” to continue with the installation. The final “Software Updates” window recommends that CICS Explorer is restarted (Figure 9):

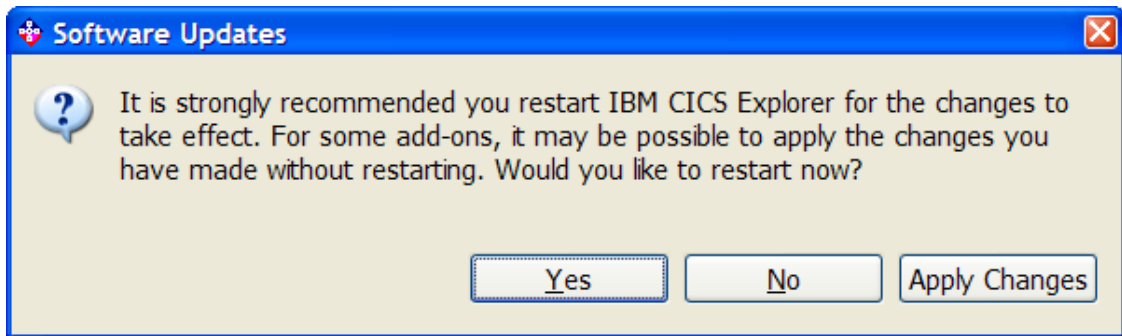


Figure 9 Software Updates... restart

8. Click “Yes” to complete the installation. CICS Explorer is restarted, and the CICS TG plug-ins are available.

Usage

When you have successfully installed the CICS TG plug-ins for CICS Explorer, provided the “CTGConnection.properties” file in the CICS Explorer program folder and restarted the CICS Explorer, start your CICS SM connection as usual. The CICS Explorer CICS SM perspective is displayed. Before any CICS TG information is displayed, the connection to CICS SM connection **must** be active.

CICS TG perspective

CICS TG plug-ins for CICS Explorer provides a “CICS TG” perspective in addition to the CICS Explorer default perspective “CICS SM”. To switch to the “CICS TG” perspective, select the Window->Open perspective->Other... menu. From the “Open Perspective” window, select “CICS TG” and click OK (Figure 10).

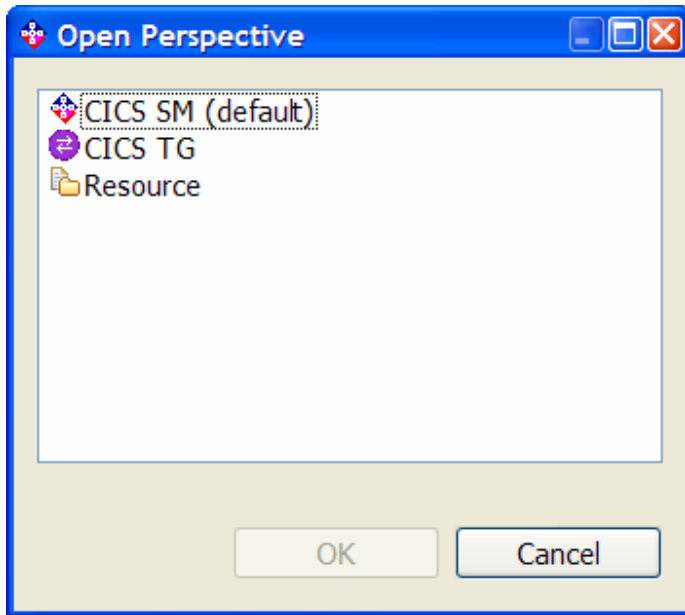


Figure 10 Open Perspective window

Note: The CICS TG plug-ins for CICS Explorer installs a “perspective shortcut” to the Open perspective menu of the CICS SM perspective (Figure 11):

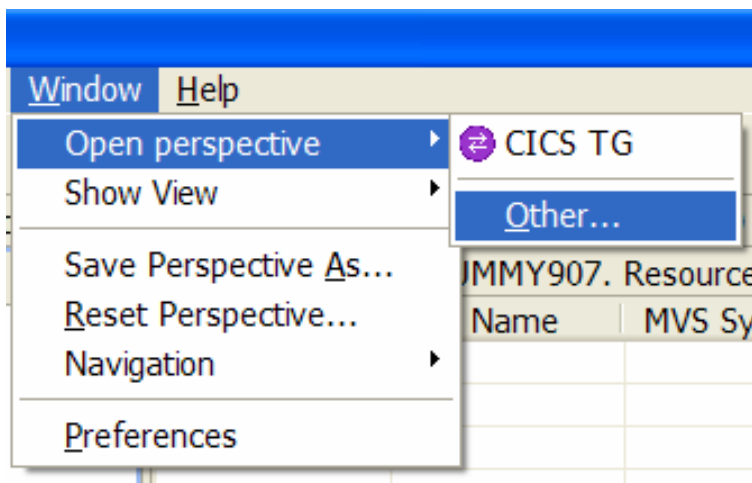


Figure 11 CICS TG Perspective shortcut

This shortcut might become visible only after selecting “Reset Perspective” on the CICS SM perspective. An alternative is to use the “Open perspective” option.

CICS TG views

Switching to the CICS TG perspective shows the “Gateway daemons” and “CICS connections” views stacked on the central pane and the “Properties” pane below. The navigator pane matches the default CICS SM perspective.

Gateway daemons view

The Gateway daemons view shows one line per Gateway daemon defined in the `CTGConnection.properties` file.

A Gateway daemon shows a status of UNAVAILABLE when any of the following are true:

- the Gateway daemon is not running
- the Gateway daemon is unreachable
- the host name or port number defined for the Gateway daemon in the `CTGConnection.properties` file is incorrect
- the statistics API protocol handler definition of the Gateway daemon does not match the definition in the `CTGConnection.properties` file, or is missing

If a Gateway daemon status is UNAVAILABLE, the Name attribute is taken from the `CTGConnection.properties` file rather than the job name.

CICS connections view

Switching to the CICS connections view shows one line per CICS connection from each active Gateway daemon.

A CICS server that is connected to a Gateway daemon using the EXCI protocol does not appear on the CICS connections view until at least one request has been sent to that CICS server.

A CICS server that is connected to a Gateway daemon using the IPIC protocol always appears on the CICS connections view. However, until at least one request has been sent to that CICS server, only values for the Name and Server attributes are available.

Note: If no data appears in the Gateway daemons or CICS connections view, select a node in the navigator panel. As the IBM CICS TG plug-ins in this SupportPac are not integrated with the CICS Explorer connection management or navigation functionality, there is no explicit “connect to Gateway daemon” option. However, selecting any node in the CICSplex navigation panel will trigger connection to all the defined Gateway daemons.

Fully Customizable

The CICS TG perspective and its views are fully customizable. Any CICS Explorer resource view might be added to the CICS TG perspective using the “Operations”, “Administration” menus, or using the Window->Show view->Other... “Show view” window.

Alternatively, the CICS TG resource views can be added to the CICS SM perspective using the Window->Show view->Other... “Show view” window. The Gateway daemons and CICS connections views can be found under the “CICS TG” category.

The Gateway daemons and CICS connections views provide a default selection of attributes. The CICS TG perspective has been designed with EXCI connections in mind. However, connection attributes applicable to IPIC connections are available for use in a customized view. Further attributes can be added or existing attributes removed from a view to suit the needs of the user.

Help capabilities

Context sensitive help is included with the CICS TG plug-ins for CICS Explorer. Select either of the CICS TG views in the central pane, or a particular attribute on the “Properties” pane and then press F1. A help panel is displayed containing either a description of the selected view, or a description of the selected attribute.

Limitations

The connectivity with Gateway daemons is not integrated with the CICS Explorer connection management facilities or navigator panel. Therefore, it is not possible to limit the “scope” of information displayed by the CICS TG views by making a selection on the navigator panel.

The filter functionality for the Gateway daemons and CICS connections views is not implemented.

Support for CICS Transaction Gateway for Multiplatforms is not included in this SupportPac.

The SupportPac includes only English language labels and help information.

Further details

For further information on the IBM CICS Explorer, including links to the CS1J or CS1O SupportPacs, refer to:

<http://www.ibm.com/software/htp/cics/explorer>

For access to all available CICS SupportPacs, refer to:

<http://www.ibm.com/support/docview.wss?uid=swg27007241>

For general information on the IBM CICS Transaction Gateway portfolio, refer to:

<http://www.ibm.com/software/htp/cics/ctg>

For further information on the IBM CICS Transaction Gateway for z/OS, refer to:

<http://www.ibm.com/software/htp/cics/ctg/zos/about/index.html>

For details of the APAR PK57718 for CICS TG for z/OS V7.1, that is required for interoperation with this SupportPac, refer to:

<http://www.ibm.com/support/docview.wss?uid=swg1PK57718>